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(54) **OPTICAL MODULES INCLUDING FOCAL LENGTH ADJUSTMENT AND FABRICATION OF THE OPTICAL MODULES**

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(57) **ABSTRACT**

Fabricating optical devices can include mounting a plurality of singulated lens systems over a substrate, adjusting a thickness of the substrate below at least some of the lens systems to provide respective focal length corrections for the lens systems, and subsequently separating the substrate into a plurality of optical modules, each of which includes one of the lens systems mounted over a portion of the substrate. Adjusting a thickness of the substrate can include, for example, micromachining the substrate to form respective holes below at least some of the lens systems or adding one or more layers below at least some of the lens systems so as to correct for variations in the focal lengths of the lens systems.